

§ 173.65

information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(4) Heavy metals (as Pb), 2 parts per million maximum.

(5) Arsenic (as As), 2 parts per million maximum.

(c) The food additive is used as a decolorizing agent and/or flocculant in the clarification of refinery sugar liquors and juices. It is added only at the defecation/clarification stage of sugar liquor refining at a concentration not to exceed 150 parts per million of copolymer by weight of sugar solids.

(d) To assure safe use of the additive, the label and labeling of the additive shall bear, in addition to other information required by the Act, adequate directions to assure use in compliance with paragraph (c) of this section.

[48 FR 37614, Aug. 19, 1983, as amended at 54 FR 24897, June 12, 1989]

§ 173.65 Divinylbenzene copolymer.

Divinylbenzene copolymer may be used for the removal of organic substances from aqueous foods under the following prescribed conditions:

(a) The copolymer is prepared in appropriate physical form and is derived by the polymerization of a grade of divinylbenzene which comprises at least 79 weight-percent divinylbenzene, 15 to 20 weight-percent ethylvinylbenzene, and no more than 4 weight-percent nonpolymerizable impurities.

(b) In accordance with the manufacturer's directions, the copolymer described in paragraph (a) of this section is subjected to pre-use extraction with a water soluble alcohol until the level of divinylbenzene in the extract is less than 50 parts per billion as determined by a method titled, "The Determination of Divinylbenzene in Alcohol Extracts of Amberlite XAD-4," which is incorporated by reference. Copies of this method are available from the Center for Food Safety and Applied Nutrition (HFS-200), Food and Drug Administration, 5100 Paint Branch Pkwy., College Park, MD 20740, or available for inspection at the National Archives and Records Administration (NARA). For information on the availability of

21 CFR Ch. I (4-1-12 Edition)

this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. The copolymer is then treated with water according to the manufacturer's recommendation to remove the extraction solvent to guarantee a food-grade purity of the resin at the time of use, in accordance with current good manufacturing practice.

(c) The temperature of the aqueous food stream contacting the polymer is maintained at 79.4 °C (175 °F) or less.

(d) The copolymer may be used in contact with food only of Types I, II, and VI-B (excluding carbonated beverages) described in table 1 of paragraph (c) of §176.170 of this chapter.

[50 FR 61, Jan. 2, 1985]

§ 173.70 Chloromethylated aminated styrene-divinylbenzene resin.

Chloromethylated aminated styrene-divinylbenzene copolymer (CAS Reg. No. 60177-39-1) may be safely used in food in accordance with the following prescribed conditions:

(a) The additive is an aqueous dispersion of styrene-divinylbenzene copolymers, first chloromethylated then aminated with trimethylamine, having an average particle size of not more than 2.0 microns.

(b) The additive shall contain no more than 3.0 percent nonvolatile, soluble extractives when tested as follows: One hundred grams of the additive is centrifuged at 17,000 r/min for 2 hours. The resulting clear supernatant is removed from the compacted solids and concentrated to approximately 10 grams on a steam bath. The 10-gram sample is again centrifuged at 17,000 r/min for 2 hours to remove any residual insoluble material. The supernatant from the second centrifugation is then removed from any compacted solids and dried to constant residual weight using a steam bath. The percent nonvolatile solubles is obtained by dividing the weight of the dried residue by the weight of the solids in the original resin dispersion.

(c) The additive is used as a decolorizing and clarification agent for treatment of refinery sugar liquors and juices at levels not to exceed 500 parts